

### **REMARKS**

Applicants have carefully reviewed the Final Office Action ("Action") dated December 8, 2009. Claims 6, 7, 10, 11, 15, 17, 18, 27 and 32 are pending in this application. In the Action, claims 6, 7, 10, 11, 15, 17, and 18 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Claesson et al. U.S. Patent Application Publication No. 2002/0075965 (hereinafter "Claesson"). Claims 27 and 32 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Claesson and further in view of Anderson U.S. Patent No 4,396,806 (hereinafter "Anderson").

Claims 6, 15, 18 and 27 are currently amended to improve form and more clearly recite the claimed subject matter. Claims 7, 10, 11, 17, and 32 are original. The amendments are fully supported by at least Figures 5 and 9 of the originally-filed specification. Therefore, no new matter is added.

Applicants respectfully traverse these rejections and request reconsideration in light of the remarks below.

#### **Claims 6, 15, and 18 are not rendered obvious by Claesson**

Claims 6, 15, and 18 are directed to a method, a system and an apparatus which include, *inter alia*, simultaneously processing a full bandwidth component signal, a bass bandwidth component signal, a midrange component signal, and a treble component signal, and later aggregating the processed component signals to create an enhanced audio signal.

First, Claesson fails to show or suggest **simultaneously processing** a full bandwidth component signal, a bass component signal, a midrange component signal, and a treble component signal. Instead, Claesson **sequentially processes** its wideband signal, the alleged full bandwidth component signal, and the other component signals in two steps. In step one, Claesson separates audio samples into transparent, dual brick wall, wideband and brick wall band signals (Claesson, Paragraphs [0065] – [0066]). In step two, Claesson further separates the wideband signal into separate frequency band signals by 2-way crossover elements, which the Action alleges are the

Applicants' bass, midrange and treble component signals. However, it is clear that Claesson's wideband signal ceases to exist after it is subsequently processed into separate frequency band signals. Therefore, it is impossible for Claesson to simultaneously process both the wideband signal and its subsequent frequency band signals. In contrast, because Applicants' full bandwidth component signal is not separated into the frequency band signals, the full bandwidth signal is processed simultaneously with the other frequency band signals (Figures 5 and 9). Therefore, Claesson fails to show or suggest simultaneously processing a full bandwidth component signal, a bass bandwidth component signal, a midrange component signal, and a treble component signal, as required in Applicants' independent claims 6, 15, and 18.

Second, Claesson also fails to show or suggest **aggregating** (e.g., by using a mixer) a processed **full bandwidth component signal and other processed component signals**, as recited in claims 6, 15, and 18. Instead, Claesson can only aggregate subsequent frequency band signals because it is the wideband signal in Claesson that is subsequently separated into frequency band signals and only these separate frequency band signals ever reach the mixer in Claesson. That is, the mixer in Claesson can only aggregate the separate frequency band signals and not both the wideband signal and its subsequent frequency band signals. In contrast, Applicants' mixer aggregates the full bandwidth component signal and the other processed component signals to recreate a standard signal. In particular, Applicants' bass, midrange, and treble component signals exist independent of the full bandwidth component signal and are processed simultaneously with this full bandwidth component signal. Therefore, Claesson also fails to show or suggest aggregating both the processed full-bandwidth component signal and the other processed component signals, as recited in claims 6, 15, and 18.

For at least these reasons, Claesson does not show or suggest the subject matter recited in Applicants' claims 6, 15 and 18 as required by MPEP 2141 to make a prima facie case for obviousness. Therefore, the 35 U.S.C. 103(a) rejections of claims 6, 15, and 18 should be withdrawn. Claims 7, 10-11, and 17 depend from claims 6 and 15, and add further limitations thereto. Therefore, Applicants respectfully request that the 35 U.S.C. 103(a) rejections of claims 7, 10-11 and 17 should be withdrawn, too.

Claims 27 is not rendered obvious by Claesson in view of Anderson

Claim 27 is directed, *inter alia*, to a system comprising a processor simultaneously processing component signals with distinct pathways including a full bandwidth pathway and three limited bandwidth pathways: a bass pathway, a midrange pathway, and a treble pathway.

The Action admits that Claesson fails to disclose a full bandwidth pathway comprising amplifiers and a compressor, and alleges that Anderson makes up for Claesson's deficiencies. However, Anderson fails to even show or suggest a full-bandwidth component signal and a full-bandwidth pathway. Instead, Anderson separates signals into channels of predefined and consecutive frequency ranges. For example, these frequency ranges might be 100 to 200 Hz for the first channel, 200 to 400 Hz for the second channel, and 400 to 1000 Hz for the third channel, etc. (see, e.g., Anderson Figure 2, column 3, lines 62-68). Nowhere does Anderson disclose a full-bandwidth component signal or a full bandwidth pathway, let alone a full bandwidth pathway comprising amplifiers and a compressor. Because Anderson fails to even show or suggest a full bandwidth component signal and a full bandwidth pathway, Anderson also cannot possibly **simultaneously processing** the full-bandwidth component signal and the bass, midrange, and treble component signals, as required by claim 27. Thus, Anderson fails to cure Claesson's deficiencies.

For at least these reasons, Claesson and Anderson, alone or in combination, fail to show or suggest all the elements recited in Applicants' claims 27, as required by MPEP 2141 to make a prima facie case for obviousness. Therefore, the 35 U.S.C. 103(a) rejections of claim 27 should be withdrawn. Claim 32 depends from claim 27 and adds further limitations thereto. Therefore, Applicants respectfully request that the 35 U.S.C. 103(a) rejection of claim 32 be withdrawn, too.

### **CONCLUSION**

In view of the foregoing amendments and remarks, Applicant believes the pending application is in condition for allowance.

Applicants hereby request a telephonic interview with the Examiner prior to issuing another Office Action if he believes this case not to be in condition for allowance.

Applicant believes no fee is due with this response other than those indicated on the attached RCE Transmittal. However, if an additional fee is due, please charge our Deposit Account No. 18-1945, under Order No. ARCU-084-101 from which the undersigned is authorized to draw.

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Respectfully submitted,

By /Tushar Parlikar/  
Tushar A. Parlikar  
Registration No.: 61,715  
ROPES & GRAY LLP  
One International Place  
Boston, Massachusetts 02110  
(617) 951-7000  
(617) 951-7050 (Fax)  
Agent For Applicant